



# Nicole Lloyd

Tuesday August 20, 2019, by [admin-STEM](#)

## **2016 Chateaubriand STEM Fellow**

**Rutgers University - Université de Lyon 1, Claude Bernard  
Microbiology**

Nicole Lloyd earned her PhD from Rutgers University, and she was a Chateaubriand fellow in 2016 at the Université de Lyon 1, Claude Bernard for 6 months.

### **In which field did you carry out your research for your PhD and what was your specific area of study?**

Microbiology; Metal and antibiotic resistant bacteria in the environment

### **What is your current occupation?**

Postdoctoral Fellow, National Institutes of Health

### **Please give a brief description of the work you completed in France:**

Dr. Nazaret's lab studies metal and antibiotic resistant bacteria in the environment. I performed phenotypic and genotypic characterization of three bacterial strains that I isolated from the gut of a fish. In Dr. Nazaret's lab, we explored metal resistance profiles, antibiotic resistance profiles, and the use of efflux pumps in resistance in these three strains. We also performed genome analysis on the isolates. I was able to advance my thesis work on the connection between mercury and antibiotic resistant bacteria in the environment.

### **How was your experience as a researcher in France?**

I had a very positive and productive experience in France. I appreciated the help of the many technicians in the department who helped with lab tasks, lab preparations, and running experiments. I was able to collaborate with different groups on campus to use shared equipment, which helped me accomplish many experiments. Finally, there were many experts that provided advice on experimentation, which was very helpful. I feel that my lab in France was better in all three of these areas compared to my lab in the US.

### **Comments on your experience as a researcher in France and conditions in your host lab:**

See answer to above question.

My lab group, especially my PI (Sylvie Nazaret), was very welcoming. She helped me explore France outside of the lab, and made sure I had the right connections to get a lot of work done during my time in the lab. The entire lab group was very helpful and supportive of me.

### **Did or will your research in France lead to any co-publications?**

yes

### **If yes, please describe (name of journal, date of publication):**

Lloyd, N.A., Nazaret, S., Barkay, T. "Genome-facilitated discovery of RND efflux pump-mediated resistance to cephalosporins in *Vibrio* spp. isolated from the mummichog fish gut". Under Review.

Lloyd, N.A., Nazaret, S., Barkay, T. "Whole genome sequences to assess the link between antibiotic and metal resistance in three coastal marine bacteria isolated from the mummichog gastrointestinal tract".

Marine Pollution Bulletin. (2018) 135:514-520.

**Did you or one of your supervisors present your work at a seminar? Do you plan on doing so? If yes, please describe (name of seminar, date, type of presentation):**

FEMS (Federation of European Microbiologists). Valencia, Spain, July 2017. Poster presentation.

ASM (American Society for Microbiology) Microbe. Atlanta, Georgia, USA. June 2018. Poster presentation.

**In your opinion, did the Chateaubriand Program contribute to closer ties between your US and French labs (why or why not)?**

Yes — it definitely did. We published one paper together, presented at two conferences, and we are in the process of writing two more papers. I have left my US lab, but I believe that my French lab may still be collaborating with other groups at Rutgers, on different projects.

**Did you improve your French while in France?**

Yes! I hardly spoke English at all in the lab. It was a great immersive experience, especially learning some of the French science vocabulary.

**Do you plan on returning to France in the future?**

I don't have any specific plans at the moment, but I would love to. I had such a positive experience living there.

**Did you participate in any extracurricular activities or travel while in France?**

I traveled quite a bit within France and visited eight other countries in Europe.